We claim:

1. A method for communicating in a time-domain wavelength interleaved network having a hub node, comprising:

transmitting substantially all communications through said hub node.

2. The method of claim 1, further comprising the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot k by a node N_i is received by a node N_j in said time-slot k.

3. The method of claim 1, wherein said synchronizing step is performed by said hub node.

4. The method of claim 1, wherein said hub node imposes a timing reference.

5. The method of claim 1, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.

6. A method for communicating performed by an interior node in a time-domain wavelength interleaved network having a hub node, comprising:

sending substantially all communications received from said hub node having a wavelength indicating said communication is destined for another node on all branches outward from said hub node.

7. The method of claim 6, further comprising the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot k by a node N_i is received by a node N_j in said time-slot k.

8. The method of claim 7, wherein said synchronizing step is performed by said hub node.

9. A node in a time-domain wavelength interleaved network having a hub node, comprising:

a tunable laser directed toward said hub node; and

a wavelength dropper for dropping signals having a wavelength associated with said node only from a fiber coming from said hub node.

10. The node of claim 9, where a transmission and reception of a message are synchronized such that a message sent in a time-slot k by a node N_i is received by a node N_j in said time-slot k.

11. The node of claim 9, wherein said hub node imposes a timing reference.

12. The node of claim 9, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.

13. The node of claim 9, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.

14. A time-domain wavelength interleaved network, comprising:

a plurality of nodes, including a hub node, wherein substantially all communications in said time-domain wavelength interleaved network pass through said hub node.

15. The time-domain wavelength interleaved network of claim 14, where a transmission and reception of a message are synchronized such that a message sent in a time-slot k by a node N_i is received by a node N_j in said time-slot k.

16. The time-domain wavelength interleaved network of claim 14, wherein said hub node imposes a timing reference.

17. The time-domain wavelength interleaved network of claim 14, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.

18. The time-domain wavelength interleaved network of claim 14, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.

19. The time-domain wavelength interleaved network of claim 14, further comprising a plurality of said nodes interconnected in a tree configuration.

20. The time-domain wavelength interleaved network of claim 14, further comprising a plurality of trees of nodes, each of said trees having a hub node, each of said hub nodes interconnected in a ring configuration.